

## REMARKS

No claims have been canceled, amended or added in this paper. Therefore, claims 1, 4-5 and 7-16 are pending and are under active consideration.

Claims 1, 4, 7, 10-12, 14 and 16 stand rejected under 35 U.S.C. 103(a) "as being unpatentable over Viscardi (US Patent No. 3076124) in view of Higginson (US Patent No. 3132048)." In support of the rejection, the Patent Office states the following:

Regarding claim 1, Viscardi describes a dosing device (doctor blade 16) arranged on an application roller (printing plate cylinder 14) such that: between the dosing device (16) and the application roller (14) a sump (reservoir 15) is provided (Viscardi: column 2, lines 17-22 and Fig. 1), and a dosing gap (gap between 16 and 14) is provided between the dosing device (16) and the application roller (14) through which a liquid is supplied to the application roller (14) to apply the liquid from the application roller (14) to one side of a substrate web (textile web 11) (Viscardi: column 2, lines 17-22 and Fig. 1). The dosing device of Viscardi comprises only a first area, and does not comprise rotatably selectable areas that differ and that have different dosing gaps, wherein said areas are selectable by rotating the dosing device. However, Higginson teaches the use of a rotatably selectable dosing device (adjustable doctor C) that forms a gap between the dosing device (C) and an application roller (cylinder B) wherein said dosing device (C) comprises rotatably selectable areas (ribs C) that differ from one another (Higginson: column 1, lines 61-66, column 2, lines 1-8, and Figs. 1-2). Higginson teaches that the use of such a rotatable dosing device (C) allows for control over the thickness of material delivered to the substrate (Higginson: column 1, lines 10-21). One of ordinary skill in the art at the time of the invention, motivated by a need to control the thickness of material passing through the dosing gap in the apparatus of Viscardi, would therefore have found it *prima facie* obvious to replace the dosing device of Viscardi with the rotatably adjustable dosing device of Higginson.

Regarding claim 4, the dosing device (C) of Viscardi in view of Higginson comprises multiple areas (ribs c) provided as external surface areas (Higginson: column 1, lines 64-66, and Figs. 1-2).

Regarding claims 7 and 16, Viscardi in view of Higginson describes a mechanical control device (indexing means, crank c2, holes c4) which selects areas of the dosing device (C) and controls the angle of the doctor blades (c) (Higginson column 1, lines 61-70).

Regarding claim 10, the external surface (ribs c) of the dosing device (C) of Viscardi in view of Higginson is part of a roller wall section (C) (Higginson: Column 1, lines 61-66 and Fig. 2).

Regarding claim 11, the doctor blade of Viscardi in view of Higginson (C) is adjustable through the use of a plurality of holes (holes c4) in order to set a dosing gap width (Higginson: column 1, lines 61-70 and Fig. 1).

Regarding claim 12, the doctor blade of Viscardi in view of Higginson (C) is capable of being rotated such that the blades (c) are directed at an angle greater [or] smaller than 90 with respect to the application roller (roller B) (Higginson: column 1, lines 66-70 and Fig. 2).

Regarding claim 14, the different areas (c) of the dosing device (C) of Viscardi in view of Higginson are even[ly] distributed over the circumference of the device (C) (Higginson: Fig. 2).

Applicants respectfully traverse the subject rejection.

Viscardi relates to a method for eliminating static electricity by applying colored material to a textile web (col. 2, lines 23-24). In connection with this method, a cake of dry ice is placed in frictional engagement with a printing plate cylinder for accelerating the sublimation of the dry ice into carbonic acid gas (col. 2, lines 58-60). This carbonic acid gas is then introduced into a color reservoir 15 and then the color is applied to the web in order to avoid static electricity. After the colored material is applied to the web, the colored material dries and the colored textile web is wound up on a wind-up roller.

Therefore, Viscardi discloses a device that has a completely different use and purpose than the device of the present invention. Moreover, Applicants respectfully submit that a person of ordinary skill in the art would not have considered combining the teachings of this document with those of Higginson, which is directed at a wall paper pasting and paper hanging apparatus for applying a paste or adhesive onto a paper, since these two patents are directed at completely different categories of devices.

Furthermore, contrary to the apparent opinion of the Patent Office that, in Viscardi, the doctor blade 16 of the color reservoir 15 is taught not to be adjustable, Applicants respectfully submit that Viscardi is completely silent as to whether the doctor blade is adjustable or not. Therefore, the doctor blade may be adjustable because, depending on the kind of colored material or the speed of the web, it is typically necessary to adjust the amount of color applied on the roller for applying on the web. Consequently, it is believed that the doctor blade 16 is also adjustable with respect to the width to the printing plate cylinder. The color could be more liquid-like or pastier, and it is unusual that a machine would be manufactured only by having one fixed doctor plate with respect to the width of the slit to the printing plate.

Therefore, the same types of arguments that Applicants presented previously against the proposed combination of Schollkopf et al. and Higginson are applicable to the present combination of Viscardi and Higginson.

Furthermore, the arguments according to the kind of applying the medium on the applicator roller by Viscardi are similar to that one by Schollkopf et al. The applicator roller of Viscardi passes

through a color reservoir and, on the end of the color reservoir, there is positioned the doctor blade so that only a specific amount of medium will remain on the applicator roller and then be transferred onto the web.

The principle of applying a paste on a paper by Higginson is different because the application roller is passing through a paste container in a dipped manner. Above and outside of the sump is the doctor plate, which then removes the excess paste from the applying or the applicator roller. Therefore, two different principles in terms of storing and applying the medium on the applicator roller are used by Viscardi and Higginson. Therefore, any combination of the two would not have been done because, by starting from Viscardi and using a doctor blade as in Higginson, a man of ordinary skill in the art would have refrained from doing so because the doctor plate of Higginson is positioned above the sump and enables the excess paste to drop back into the sump. However, by using a doctor plate as shown in Higginson, instead of a doctor plate in a color reservoir of Viscardi, a person of ordinary skill in the art would have had the problem to close the bottom of the color reservoir and avoid dropping down of a color medium onto a web because of different lengths of the doctor plates. If such a doctor plate as in Higginson were to be introduced into the color reservoir and the kind of doctor plate were to be changed, then a large amount of medium would drop down on the web because no closed bottom could be achieved.

Additionally, Applicants respectfully submit that the same kinds of arguments presented on page 9, line 3, through page 10, line 9, of Applicants' Response of June 10, 2010, are applicable

here; therefore, Applicants herein incorporate these comments by reference, substituting Viscardi for Schollkopf et al. where applicable.

Accordingly, for at least the above reasons, the subject rejection should be withdrawn.

Claim 5 stands rejected under 35 U.S.C. 103(a) “as being unpatentable over Viscardi in view of Higginson as applied to claims 1, 4, 7, 10-14 and 16 above, and further in view of Broderick (US Patent No. 3924313) and Klenk (US Patent No. 2995180).” In support of the rejection, the Patent Office states the following:

Regarding claim 5, Viscardi in view of Higginson teaches a smooth roller (14) (Viscardi: Fig. 1), but does not teach an optionally smooth or structured roller. However, Broderick teaches that engraved cells on the roller surface of an applicator allows for the transfer of liquid as the liquid is picked up in the cells of the roller (Broderick: column 1, lines 5-21). One of ordinary skill in the art at the time of the invention, desiring to improve the ability of the roller of Viscardi in view of Higginson to transfer liquid, would therefore have found it obvious to make use of a structured application roller.

Further regarding claim 5, the doctor blade (c) and external surfaces areas (c) of Higginson are smooth (Higginson: Fig. 1). However, it is known in the art, as taught by Klenk, that a structured doctor blade (doctor blade 4) can be used to produce a pearled or creped substrate (Klenk: column 2, lines 27-36 and Figs. 2-4). One of ordinary skill in the art at the time of the invention, motivated by a need to produce pearled or creped paper, would therefore have found it obvious to make use of the structured doctor blade of Klenk in the apparatus of Viscardi in view of Higginson and Broderick.

Applicants respectfully traverse the subject rejection. Claim 5 depends from claim 1. Claim 1 is patentable over Viscardi in view of Higginson for at least the reasons given above. Broderick and Klenk fail to cure all of the deficiencies of Viscardi and Higginson with respect to claim 1.

Therefore, based at least on its dependency from claim 1, claim 5 is patentable over the present combination of Viscardi, Higginson, Broderick, and Klenk.

Accordingly, for at least the above reasons, the subject rejection should be withdrawn.

Claim 8 stands rejected under 35 U.S.C. 103(a) “as being unpatentable over Viscardi in view of Higginson as applied to claims 1, 4, 7, 10-14 and 16 above, and further in view of Remer (US Patent No. 3565039).” In support of the rejection, the Patent Office states the following:

Regarding claim 8, Viscardi in view of Higginson do not teach a temperature-regulating facility arranged inside or outside the roller-shaped body of the dosing device. However, Remer discloses a web substrate coating facility (unit 20 and shell 22) arranged outside a system of rollers (26, 27, 24) that comprises a temperature-regulation coil (coil 32) (Remer: column 3, lines 36-70 and Fig. 1). Remer further teaches that temperature regulation of the region around the coating apparatus can facilitate various coating operations by, for example, evaporating a solvent vehicle that is absorbed by the web (Remer: column 3, lines 69-75 to column 4, lines 1-7). One of ordinary skill in the art, motivated by a need to deliver a dosed coating comprising a solvent vehicle to a web substrate would have found it obvious at the time of the invention to place the dosing device of Viscardi in view of Higginson into the temperature-regulated facility of Remer, with the reasonable expectation that such a modification would allow for the rapid evaporation of the solvent.

Applicants respectfully traverse the subject rejection. Claim 8 depends from claim 1. Claim 1 is patentable over Viscardi in view of Higginson for at least the reasons given above. Remer fails to cure all of the deficiencies of Viscardi in view of Higginson with respect to claim 1. Therefore, based at least on its dependency from claim 1, claim 8 is patentable over the present combination of Viscardi, Higginson and Remer.

Accordingly, for at least the above reasons, the subject rejection should be withdrawn.

Claim 9 stands rejected under 35 U.S.C. 103(a) “as being unpatentable over Viscardi in view of Higginson as applied to claims 1, 4, 7, 10-14 and 16 above, and further in view of Feiertag (US Patent No. 3664561).” In support of the rejection, the Patent Office states the following:

Regarding claim 9, Viscardi in view of Higginson does not explicitly teach the use of guide rollers upstream of the application roller. However, it was well-known in the art at the time of the invention, as exemplified by Feiertag, to use adjustable guide rollers upstream of a processing station to ensure that the substrate is properly aligned (Feiertag: column 1, lines 39-64). One of ordinary skill in the art at the time of the invention, needing to properly align the substrate prior to coating in the apparatus of Viscardi in view of Higginson, would therefore have found it *prima facie* obvious to add guide rollers to the apparatus as is taught in Feiertag.

Applicants respectfully traverse the subject rejection. Claim 9 depends from claim 1. Claim 1 is patentable over Viscardi in view of Higginson for at least the reasons given above. Feiertag fails to cure all of the deficiencies of Viscardi in view of Higginson with respect to claim 1. Therefore, based at least on its dependency from claim 1, claim 9 is patentable over the present combination of Viscardi, Higginson and Feiertag.

Accordingly, for at least the above reasons, the subject rejection should be withdrawn.

Claims 13 and 15 stand rejected under 35 U.S.C. 103(a) “as being unpatentable over Viscardi in view of Higginson as applied to claims 1, 4, 7, 10-14 and 16 above, and further in view of Nordby (US Patent No. 6637330).” In support of the rejection, the Patent Office states the following:

Regarding claims 13 and 15, Viscardi in view of Higginson teach the use of doctor blades (c) (Higginson: column 1, lines 64-66 and Fig. 2), but do not teach the use of rapidly detachable doctor blades.

However, the use of such clamps to hold doctor blades is known in the art, as exemplified by Nordby. Nordby discloses a dosing device with doctor blades (4) that can be detached by turning a lever (handle 35) that actuates an eccentric clamp (clamping rail 5, beam 3)(Nordby: column 10, lines 13-28, Fig. 13a-d). Nordby further teaches that said doctor blades wear down rapidly (Nordby: column 1, lines 41-55).

One of ordinary skill in the art, motivated by a need to maintain a sharp working surface on the doctor blades, would have found it obvious at the time of the invention to use lever-actuated eccentric clamps to affix doctor blades to the scrapers of Viscardi in view of Higginson, with the expected result that such a modification would allow for worn working surfaces to be replaced quickly.

Applicants respectfully traverse the subject rejection. Claims 13 and 15 depend from claim 1.

Claim 1 is patentable over Viscardi in view of Higginson for at least the reasons given above. Nordby fails to cure all of the deficiencies of Viscardi in view of Higginson with respect to claim 1. Therefore, based at least on their respective dependencies from claim 1, claims 13 and 15 are patentable over the present combination of Viscardi, Higginson and Nordby.

Accordingly, for at least the above reasons, the subject rejection should be withdrawn.

In conclusion, it is respectfully submitted that the present application is in condition for allowance. Prompt and favorable action is earnestly solicited.

If there are any fees due in connection with the filing of this paper that are not accounted for, the Examiner is authorized to charge the fees to our Deposit Account No. 11-1755. If a fee is

required for an extension of time under 37 C.F.R. 1.136 that is not accounted for already, such an extension of time is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA D.C. 22313-1450 on October 1, 2020

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